# AZ Department of Corrections DC13007 Adult Inmate Management System (AIMS2) Weekly Status Report

## For week ending **07/12/2019**

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## Summary

A project timeline/plan on performance metrics (including counts) recorded on the following areas:

- 1. Bug fixes & User acceptance
- 2. Report development & Acceptance
- 3. Module development updates
- 4. Change Request development milestones
- 5. Interface development between systems

#### **Bug fixes & User acceptance**

Last week Total (Excluding Closed) Bug count: 203 (0 critical, 124 high; 7/5)
This weeks Total (Excluding Closed) Bug count: 209 (0 critical, 129 high; 7/12)

| Date    | # New bugs found | Total # of Repeated<br>bugs identified<br>(Previously in<br>Resolved Stage) | Total # bugs<br>Claimed Resolved<br>by B&D | # Initial UAT<br>Accepted ADC |
|---------|------------------|---|--|-------------------------------|
| 6/21/19 | 20               | 76  | 64   | 37                            |
| 6/28/19 | 47               | 49  | 87   | 67                            |
| 7/5/19  | 22               | 46  | 97   | 25                            |
| 7/12/19 | 37               | 50  | 87   | 27                            |
| 7/19/19 |                  |   |  |                               |
| 7/26/19 |                  |   |  |                               |
| 8/2/19  |                  |   |  |                               |
| 8/9/19  |                  |   |  |                               |
| 8/16/19 |                  |   |  |                               |
| 8/23/19 |                  |   |  |                               |

| 8/30/19  |  |  |
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| 9/6/19   |  |  |
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| 11/15/19 |  |  |
| 11/22/19 |  |  |
| 11/29/19 |  |  |

**Risk**: data migration bugs are a detriment to testing reports and interfere with our ability to fix other bugs, impeding our ability to move modules to Phase 2

Countermeasure: Conduct root cause analysis for difficult bugs, especially data migration bugs

**Risk**: it is only feasible to conduct data testing for a small sample of the hundreds of thousands of inmate records and other migrated data, leaving the possibility of bugs we fail to identify before pilot **Countermeasure**: Test as large a sample as possible, continue data testing each data migration cycle

**Risk**: the program continues to find new significant bugs, although we close bugs somewhat faster than we find them. If we continue to find significant bugs as we approach pilot, we may have modules unready for end-to-end testing

**Countermeasure:** continue systematic testing and expand testing procedure to find and deal with as many bugs as possible as early as possible

## Report development & Acceptance

Last weeks Total Fully Accepted Report Count: 7 (7/5)
This weeks Total Fully Accepted Report Count: 7 (7/12)

**Note:** # of in-scope reports declined by one during the week of 7/12 and is now 153

Please include multiple lines to your updates when needed.

| Date     | # DEV<br>Completed<br>by B&D<br>(Delivered<br>to ADC) | # Mig (data<br>fidelity)<br>accepted by<br>ADC | # UAT Accepted<br>by ADC | # Reports due by<br>Gantt 5.2<br>Baseline | Milestone met<br>expected timeline?<br>(Yes or no) |
|----------|---|--|--------------------------|---|--|
| 6/21/19  | 37  | 15   | 0                        | 30  | No   |
| 6/28/19  | 40  | 18   | 7                        | 45  | No   |
| 7/5/19   | 40  | 21   | 7                        | 45  | No   |
| 7/12/19  | 42  | 28   | 10                       | 60  | No   |
| 7/19/19  |   |  |                          |   |  |
| 7/26/19  |   |  |                          |   |  |
| 8/2/19   |   |  |                          |   |  |
| 8/9/19   |   |  |                          |   |  |
| 8/16/19  |   |  |                          |   |  |
| 8/23/19  |   |  |                          |   |  |
| 8/30/19  |   |  |                          |   |  |
| 9/6/19   |   |  |                          |   |  |
| 9/13/19  |   |  |                          |   |  |
| 9/20/19  |   |  |                          |   |  |
| 9/27/19  |   |  |                          |   |  |
| 10/4/19  |   |  |                          |   |  |
| 10/11/19 |   |  |                          |   |  |
| 10/18/19 |   |  |                          |   |  |
| 10/25/19 |   |  |                          |   |  |
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| 11/8/19  |  |  |  |
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**Risk**: The program is late in receiving and being ready to test reports, resulting in uncertainty whether we will be able to receive, test, and accept reports in time for the pilot

**Countermeasures:** We now have proactive reports from B&D telling us the reports that will soon be available for testing, and we have the organizational structure in place for the right individuals to take immediate action as the reports become available.

**Risk:** For every report that passes UAT testing, we have two reports that result in bugs for repair at either MIG or UAT, putting the timeline at risk.

**Countermeasure:** Increase collaboration between ADC test administrators and B&D developers with regular co-location. Set a regular cadence for review of bug backlog and problem-solving between ADC and B&D. Assign a B&D and ADC person to each bug.

**Risk:** In the earlier months, a significant obstacle was lack of communication of questions and answers about reports between ADC and B&D staff.

**Countermeasure:** We have dramatically increased the time B&D is located on-site and assigned ADC personnel to each report to support testing and to respond to B&D's questions.

**Risk:** The pace of report delivery from B&D's development team to ADC for testing is currently behind schedule, leading to the risk of not having the reports in time for testing before pilot and go-live.

**Countermeasure:** B&D communicates the number of reports in each phase of the pipeline and lists the reports that are nearing readiness for delivery so ADC can provide better support and be ready to test soon after they are delivered.

B&D Pipeline status on 2019-07-05 was:

- 1: Backend development: 80 reports
- 2: Frontend development: 9 reports
- 3: Quality assurance: 16 reports

The remaining 48 are either delivered to ADC for testing or are soon to be delivered. We will continue to monitor this pipeline weekly.

# Module development (Phase 2 Is Readiness for End-to-End Testing)

Last week total Modules Completed (Phase 2) Count: **23** (7/5) This weeks Total Modules Completed (Phase 2) Count: **24** (7/12)

| Date     | # of modules moved from<br>complete to incomplete<br>(Phase 2 to Phase 1) | # Modules "completed" by<br>B&D<br>(Phase 1 to Phase 2) | # UAT Accepted by ADC<br>(End to End Phase 2<br>Testing Complete) |
|----------|---|---|---|
| 6/21/19  | 1   | 0   | 0   |
| 6/28/19  | 2   | 5   | 0   |
| 7/5/19   | 1   | 2   | 0   |
| 7/12/19  | 3   | 4   | 0   |
| 7/19/19  |   |   |   |
| 7/26/19  |   |   |   |
| 8/2/19   |   |   |   |
| 8/9/19   |   |   |   |
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**Risk:** with each build and bug resolution, there is the potential for regression or the possibility of new bugs being revealed in testing. There is no way of knowing what future bugs will be discovered and will need resolution.

**Countermeasures:** Rigorous process for regression testing, and short response times, good tracking mechanisms for script testing. Follow up with B&D to identify root causes of regression.

**Risk:** regression or instability in the modules harms user perceptions of the AIMS2 system, which may limit motivation and organizational ability to achieve the highest levels of user adoption **Countermeasure:** Celebrate program success and accentuate the improvements the system will bring. Make sure that users have sufficient training and support material to aid adoption efforts.

**Risk:** bugs might be missed in script coverage, which will lead to too much bug discovery during end-to-end Phase 2 testing in September to all a "go" decision for pilot in October **Countermeasure:** Increase informal end-to-end testing early (starting in July) and increase variations in testing to find and address more high-severity bugs before Phase 2 end-to-end testing begins.

# **Change Request (CR) Development Milestones**

Last week total Change Request Remaining: 5
This week total Change Request Remaining: 5 (CR-67, 75, 76, 78, 79)

| Date    | CR #<br>Completed<br>by B&D | Description   | UAT<br>Accepted<br>by ADC?<br>(Yes or No) | Ready for<br>Payment?<br>(Yes or<br>No) | Date<br>Justification<br>sent to ASET |
|---------|-----------------------------|---|---|---|---------------------------------------|
| 6/21/19 | 4                           | CR-70-35357-Sentence Element - DC to Probation CR-71-35657-Sentence Element - Weapon Type CR-72-35658-Sentence Element - Injury CR-73-35659-Sentence Element - Probation Revocation | Yes                                       | Yes                                     | 7/10                                  |
| 6/28/19 | 2                           | CR-69-30126-Transition Minor<br>Discipline<br>CR-74-30497-Community Violence<br>Risk Level  | Yes                                       | Yes                                     | 7/10                                  |
| 7/5/19  | 2                           | CR-76-36066-Prior Adult Felony<br>Convictions<br>CR-77-36574-UC-IR-1.3 Facilitator<br>Drop Down needs to display all<br>AIMS2 users   | CR-76: No<br>CR-77: Yes                   | CR-76: No<br>CR-77:<br>Yes              | CR-77: 7/10                           |
| 7/12/19 | 1                           | CR-79-36224-UC Discipline Scoring Level 2   | No  | No                                      | N/A                                   |
| 7/19/19 |                             |   |   |   |                                       |
| 7/26/19 |                             |   |   |   |                                       |
| 8/2/19  |                             |   |   |   |                                       |
| 8/9/19  |                             |   |   |   |                                       |
| 8/16/19 |                             |   |   |   |                                       |
| 8/23/19 |                             |   |   |   |                                       |
| 8/30/19 |                             |   |   |   |                                       |
| 9/6/19  |                             |   |   |   |                                       |
| 9/13/19 |                             |   |   |   |                                       |
| 9/20/19 |                             |   |   |   |                                       |

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| 11/29/19 |  |  |  |

**Issue:** CR-75 Protective Custody Level 3 offenses is not scheduled to be handed off to ADC until October, which is dangerously close to our Perryville pilot

**Countermeasure:** keep the testing of the modules and other change requests up to date so that we are ready to take quick action to test and accept the change request once it is ready; complete all other work that can be front-loaded so resources are available for when the CR is ready

# Interface development between systems (Total System Interfaces: 30)

Last week total Interface Remaining: **30** This week total Interface Remaining: **30** 

| Date     | # Interfaces Completed by B&D<br>(Hand off to ADC) | # Initial UAT<br>Accepted by ADC | #Interfaces Formally Accepted by ADC |
|----------|--|----------------------------------|--------------------------------------|
| 6/21/19  | 30   | 21                               | 0                                    |
| 6/28/19  | 30   | 21                               | 0                                    |
| 7/5/19   | 30   | 21                               | 0                                    |
| 7/12/19  | 30   | 21                               | 0                                    |
| 7/19/19  |  |                                  |                                      |
| 7/26/19  |  |                                  |                                      |
| 8/2/19   |  |                                  |                                      |
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| 10/25/19 |  |                                  |                                      |
| 11/1/19  |  |                                  |                                      |
| 11/8/19  |  |                                  |                                      |
| 11/15/19 |  |                                  |                                      |

| 11/22/19 |  |  |
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| 11/29/19 |  |  |

**Risks:** Although most of the interfaces are nearing completion, PC AIMS is in active development without full clarity on what work will be needed

**Countermeasures**: New manager is putting extra resources and monitoring to make sure the PC AIMS interface makes sufficient process to not put the schedule at risk

Increased collaboration between ADC PC AIMS team and B&D data team to supply schema and other necessary information

**Risk:** Interface project manager is leaving the department, increasing the risk of schedule slips or mistakes

**Countermeasure:** backfill the position before the transition occurs, monitor the effort to ensure progress continues, conduct formal knowledge and responsibility transfers